March 29, 1927. J. A. WULFTANGE 1,622,363

GRILLE

Filed Aug. 21, 1925

Fig. 1.

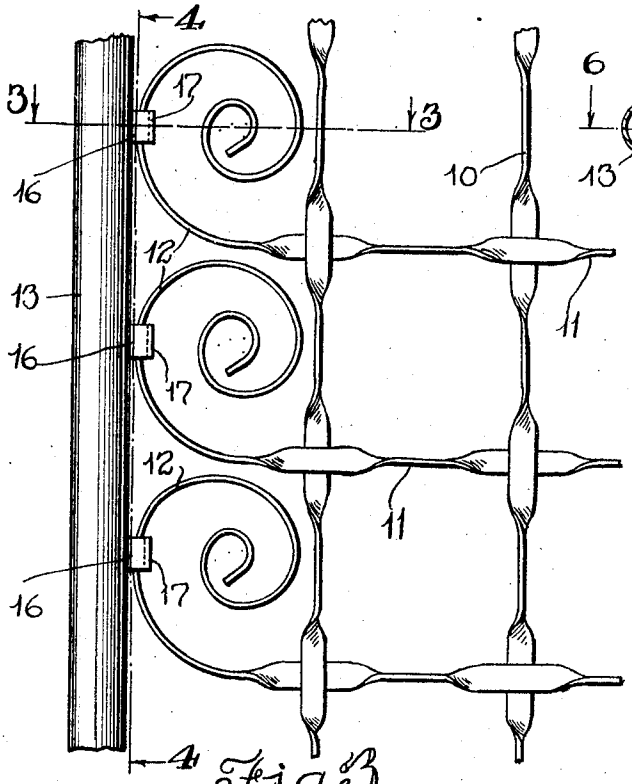


Fig. 2.

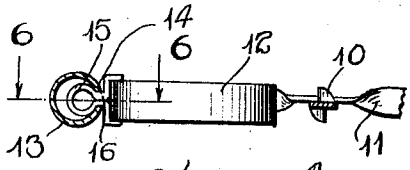


Fig. 4.

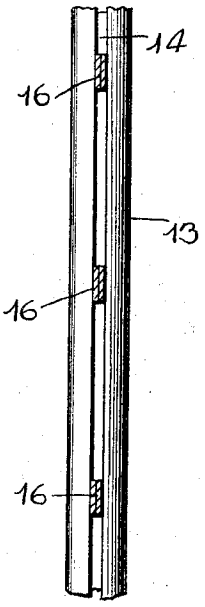


Fig. 3.

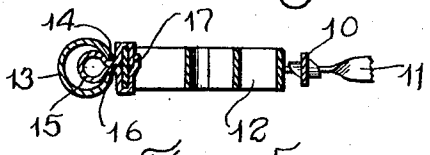


Fig. 5.

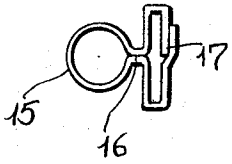
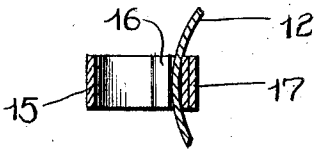


Fig. 6.



INVENTOR.
John A. Wulftange.
BY Walter W. Burne
ATTORNEYS.

Patented Mar. 29, 1927. 1,622,363

UNITED STATES PATENT OFFICE.

JOHN A. WULFTANGE, OF HAMILTON, OHIO.

GRILLE.

Application filed August 21, 1925. Serial No. 51,619.

This invention relates to grilles and is particularly related to the means for fastening the edge to the body of grilles such as are used for the protection of doors and windows and as office and bank partitions and for similar uses.

In the manufacture of grilles, at the present time, the means for fastening the body to the edges thereof are usually at fixed places. This construction makes necessary accurate fitting of the fastening means and causes difficulty in obtaining registration of the securing means in the edge with the coacting portion in the body. Further, the fixed relation of the edge relative to the body, results in difficulty in fitting the grilles to places where they are being installed.

The primary object of the present invention is the provision of an improved window door and partition grille which will not embody structure open to the above noted objections.

Other objects of my invention are to produce a grille for doors, windows, partitions and like purposes which, (1) will have a series of attaching means to connect the body to the edge and which need not necessarily be exactly the same distance apart, (2) will be so constructed that the securing means may be placed in the edge and afterward attached to the body or (3) may be first attached to the body and then the edge applied, (4) will be capable of easy repair in case of damage and without the need of an expert workman, (5) will be capable of assembly by unskilled workmen, (6) will be cheap of manufacture, (7) strong of construction and (8) will yield between the body and edge portions when pressure is brought against the same.

Other and further objects will be apparent to those skilled in the art from a reading of the complete specification and claims.

Referring to the drawing wherein I have illustrated an embodiment of my invention,

Fig. 1 is front view of a fragmental portion of a grille and having its edge made according to my invention.

Fig. 2 is a top plan view.

Fig. 3 is sectional view on the line 3—3 of Fig. 1.

Fig. 4 is a cross sectional view on the line 4—4 of Fig. 1.

Fig. 5 is a top plan view of the connector.

Fig. 6 is an enlarged cross sectional view on the line 6—6 of Fig. 2, the edge member being omitted.

Like reference characters refer to the same or similar parts throughout the several views.

The numeral 10 designates the horizontal bars and 11 the vertical bars of the grille illustrated in the drawing and embodying my invention. At the end of the horizontal bar, as illustrated, I have shown a spiral ornamental end 12, the outer coil of which is nearly tangent to the edge member 13.

The edge member 13 is in the form of a hollow cylindrical member such as a pipe and having a slot 14 throughout its length.

This slot 14 is provided to cooperate with a connecting means slidable therein and connected to the body of the grille.

The connecting means is provided with a portion within the edge member which, when in position, cannot be removed through the slot. This portion is shown as a cylindrical portion 15 as clearly shown in Fig. 2. The ends of the cylindrical portions lie together at 16 and extend through the slot 14. After passing through the slot 14, the two ends of the connecting means separate and extend around the outer loops 12 of the spirals at the ends of the horizontal members 11. After surrounding the loops 12, the ends of the connecting means overlap as illustrated at 17.

In assembling the parts, either of two different methods may be used. The body of the grille, having been completed, the connecting members may be all placed in the slot 14, their ends not being closed to lapping position as at 17, but open to receive the outer coil of the spiral. The connecting members are moved in the slot until opposite the coil to which it is to be attached. After the coil has been placed in the connecting means, the ends of the latter are bent over as illustrated in the drawing.

If desired, the connecting means may be first applied to the outer coils 12 after which the edge member is slid over the cylindrical portions 15.

My improved connecting means makes unnecessary the registration of holes in the edge member with similar holes in the spiral member, for riveting as in some types of grilles. In addition, the assembly operations are simple, and may be quickly and easily performed by inexpert workmen.

Also, the grille may be easily repaired in case of damage and the parts will yield by sliding in the slot and by the spiral portion sliding in the connector when pressure is brought to bear on the grille body.

While I have illustrated and described an embodiment of my invention in detail, I desire to have it understood that I do not limit myself to the exact showing and that modifications and changes may be made without departing from the spirit of my invention and within the scope of the appended claims.

Having described my invention, what I claim is:—

1. A grille having a body portion and an edge member, a plurality of means for yieldingly connecting the body portion and edge member together whereby the body member may yield relative to the edge member in a direction parallel to the edge member and also yield resiliently toward and from the edge member.

2. A grille having a body portion and an edge member, the body portion being provided with resilient members adjacent but outside the edge member, and separate means for yieldingly connecting the edge member to the resilient members.

3. A grille having a body portion and an edge member, the body portion being provided with resilient members adjacent the edge member, the edge member being provided with a guide means along its length and separate means for connecting the guide means to each of the resilient members.

4. A grille having a body portion and a hollow edge member, the body portion being provided with a resilient member adjacent but outside the edge member, the edge member being provided with a groove along its length and separate means slidable in the groove and connected to the resilient member to hold the edge member to the body portion.

5. A grille having a body portion and a hollow edge member, the edge member being provided with a slot and means slidable in the slot and yieldably connected with the body member to connect the latter to the edge member but outside the slot thereof.

6. A grille having a body portion comprising a plurality of spring members adjacent its edge, a hollow edge member provided with a longitudinal slot, means for connecting the spring members to but outside the edge members, each comprising a portion within the hollow edge member having a greater width than the slot, a portion extending through the slot and a portion surrounding a portion of the spring member.

7. A grille having a body portion comprising a plurality of spring members adjacent its edge, a hollow edge member provided with a longitudinal slot, means for connecting the spring members to the edge member, each comprising a sheet metal strip having a portion within the edge member bent in the form of a cylinder, portions extending through the slot and bent around a portion of the spring members.

8. A grille having a body portion, a hollow edge member provided with a longitudinal slot, means for connecting the body portion to but outside the edge member, each comprising a sheet metal strip having a portion within the edge member bent to have a greater width than the slot in the edge member, a portion extending through the slot and a portion surrounding a part of the body portion of the grille.

In testimony whereof I hereunto affix my signature.

JOHN A. WULFTANGE.